

Keep Trees Safe During Construction

Are you remodeling your home? Is construction planned in your neighborhood? Are trees on or near the site? If so, remember to consider the negative impact of construction on trees. Many construction procedures can be devastating to surrounding trees if no measures have been taken to protect them. Visible injuries are most recognizable, but it is damage to the root systems that often results in tree loss. Planning can minimize some of the more common damage to trees.

Types of damage

- Cutting of Roots. Digging and trenching to install underground utilities will likely sever a portion of the roots of trees in the area. The roots of a tree are found in the upper 6 to 12 inches of soil. Roots play a critical role in anchoring the tree. If just one major root is severed, the tree can lose 5 to 20 percent of its root system. Less damage is done if utilities are tunneled under tree roots rather than across them.
- Soil Compaction. An ideal soil for root growth and development is about 50% pore space. These pores are filled with water and air. The heavy equipment used in construction compacts the soil and dramatically reduces the amount of pore space thereby decreasing the amount of oxygen essential to healthy roots.
- Exposure to the Elements. Removing neighboring trees exposes remaining trees to additional sunlight and winds. The higher levels of sunlight can cause sunscald on the branches, and trees are more prone to breaking from wind throw.
- Physical Injury. Construction equipment can injure the above ground portion of a tree by breaking branches, tearing the bark and wounding the trunk. These injuries are permanent, and can cause tree death

Plan ahead

Careful planning will save the risk and expense of repairing or removing damaged trees. Because the ability to repair construction damage to trees is limited, it is vital that trees be protected from injury. The contractor working on your property may need to be educated regarding the value of your trees and the importance of saving them.

- The single most important action you can take is to protect the roots within the drip line of the tree canopy. Allow at least one foot of space from the trunk for each inch of trunk diameter. A twelve-inch tree needs a twelve-foot diameter fenced off area around the trunk.
- It is best to allow only one access route on and off the property, and specify where vehicles and equipment can park away from protected trees.
- Monitor construction and work as a team with the contractors. Your vigilance will help the workers stay aware of your concerns.

Treatment and repair

There are treatments that can save some trees harmed by construction, but action must be taken right away. Trees may need watering, mulching, bracing, pruning, or even removal. Each tree should be evaluated individually to ensure that it receives the appropriate treatment, repair, and follow up care.

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